

**REMARKS**

Claims 1-42 are pending in this application. Application has amended claims 1, 13, 18, 20, 24, 34, 38 and 39 herein. No claims have been cancelled and no new claims have been added. Claims 13 and 34 have been rewritten into independent form. Claims 18, 20, 38 and 39 have been amended to correct their dependencies in view of the amendments to claims 1, 13, 24 and 34. As a result of these amendments, claims 1-42 are pending for examination with claims 1, 13, 24 and 34 being independent claims. No new matter has been added. The application as presented is believed to be in condition for allowance.

Applicant notes that the Office Action does not address pending claims 4 or 8. Applicant respectfully requests that the Examiner indicate the status of claims 4 and 8 in the next communication.

**Rejection of Independent Claims 1 and 24**

Claims 1, 2, 10, 12, 16, 17, 20, 22-25, 29, 31, 33, 36, 41 and 42 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,056,779 to Toler (hereinafter "Toler"). Applicant has amended independent claims 1 and 24 to overcome this rejection.

Independent claim 1 has been amended to incorporate the subject matter recited in dependent claim 18. Independent claim 24 has been amended to incorporate the subject matter recited in dependent claim 38. With respect to claims 18 and 38, the Examiner acknowledges that "Toler does not disclose the system comprising a directional antenna having focused transmit and reception patterns that is coupled to the first transmitter/receiver unit." Therefore, this amendment to claims 1 and 24 overcomes the rejection under 35 U.S.C. §102(b) because Toler fails to disclose at least one limitation recited in Applicant's independent claims, as amended.

Claims 18 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Bartholomew (U.S. 5,818,385). Applicant respectfully traverses this rejection as it now applies to independent claims 1 and 24. In addition, claims 18 and 38 have been amended to now depend from claims 13 and 34, respectively. Applicant will address the rejection as it applies to amended claims 18 and 38 below.

In regard to claim 1, the Examiner asserts that Bartholomew discloses a system

comprising a directional antenna having focused transmit and reception patterns and that “it would have been obvious to one of ordinary skill in the art at the time the invention was made” to modify Toler to “have an antenna having a focused transmit pattern in order to achieve a highest gain radiation pattern.” In regard to independent claim 24, the Examiner similarly contends that “Bartholomew discloses the acts of re-transmitting the information signal are performed by re-transmitting the information signal in a focused pattern,” and that it “would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit in a focused pattern in order to achieve a highest gain radiation pattern.” Applicant respectfully disagrees with the assertion that it would have been obvious to combine Toler and Bartholomew as proposed in the Office Action because, as discussed below, Toler teaches away from this combination.

Toler is directed to a communications system involving portable-mobile-base station transmission and to a method that prevents interference caused by more than one mobile repeater at a single location relaying simultaneously. According to Toler, the system includes a base station and a plurality of mobile units communicating on a first frequency. Each mobile unit is mounted in a vehicle and includes a portable unit which can be plugged in for charging. Toler discloses that when the operator leaves the vehicle, the portable unit can be detached and carried on his person (col. 2, lines 18-23). Toler further discloses when a priority mobile receives a transmission on the first or base station frequency in the absence of a communication from a portable unit, it repeats out the received information to all nearby portable units. Toler’s prioritization scheme to prevent interferences among units depends on the mobile units being able to send transmissions to and receive transmissions from all nearby mobile and portable units so that only one unit in a given area becomes a priority unit. There is no motivation to modify Toler to use a directional antenna with a focused radiation pattern because then the units would only transmit to and receive from units in a particular direction in which that focused radiation pattern is directed. This would defeat Toler’s purpose because any units not in located in the direction in which the directional antenna is pointed would not receive transmissions and accordingly, would become priority units (Toler discloses that the unit that hears no activity becomes the priority unit, see col. 2, lines 50-60). This could lead to establishment of multiple priority units that could interfere with one another, the exact effect

that Toler seeks to prevent. Toler relies on each unit being able to communicate with all other units in the area, regardless of their angular position with respect to each other and there is thus no motivation to restrict Toler's units to communicating only in one direction by using a directional antenna with a focused (rather than omni-directional) radiation pattern. Rather, Toler teaches away from such a modification because the modification would render the units unsuitable for Toler's purpose, as discussed above. Accordingly, the combination of Toler and Bartholomew proposed in the Office Action is improper for lack of motivation to combine and therefore, cannot stand.

In view of the foregoing, withdrawal of the rejection of claims 1 and 24 is respectfully requested.

Each of claims 2, 10, 12, 17, 22 and 23 depends from claim 1 and is therefore allowable for at least the same reasons as discussed in regard to claim 1. Similarly, claims 25, 29, 31, 33, 36, 41 and 42 depend from claim 24 and are therefore allowable for at least the same reasons as is claim 24. Accordingly, withdrawal of the rejection of claims 2, 10, 12, 17, 22, 23, 25, 29, 31, 33, 36, 41 and 42 is respectfully requested.

Claims 16 and 20 (as amended) depend from claim 13 which has been rewritten into independent form and which is not rejected as being anticipated by Toler, nor rendered obvious by a combination of Toler and Bartholomew. Therefore, this rejection is moot with respect to these claims.

#### Rejection of Newly Independent Claims 13 and 34

Claims 13-15, 34, 35 and 37 stand rejected as being unpatentable over Toler in view of Sarnoff (U.S. 2,571,386). Applicant respectfully traverses this rejection.

Applicant's claim 13 recites that "each of the first, second and third passenger vehicles travels along a line of travel, and wherein the receipt of the information signal and transmission of the information signal between each of the first, second and third passenger vehicles is along the line of travel." Similarly, Applicant's claim 34 recites that "the act s of transmitting and re-transmitting the information signal include transmitting and re-transmitting the information signal between the first, second and third passenger vehicles along a line of travel of the first, second and third passenger vehicles." Contrary to the assertions in the Office Action, these

limitations are not disclosed or suggested by the references of record because the proposed combination of Toler and Sarnoff is improper for at least the reasons explained below.

The Examiner acknowledges that “Toler does not disclose each of the first, second and third passenger vehicles travel along a line of travel, and wherein receipt of information signal and transmission of the information signal between first, second and third passenger vehicles is along a line of travel,” but states that Sarnoff discloses these elements. The Examiner contends that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the vehicles go along a line of travel in order to follow a line of flight...from origination to destination.” Applicant respectfully disagrees.

As discussed above, Toler is directed to a scheme to establish priority among a plurality of units in an area to prevent interference caused by simultaneous transmission by more than one of the units. Toler further discloses that this system can be used by, for example police, firefighting and forestry departments where a number of multiple units converge on a location (e.g., in response to an emergency situation) to prevent interference between the multiple units. Once a priority unit is established, Toler discloses that when a priority repeater (mobile unit) receives a transmission on the first or base station frequency in the absence of second frequency transmission it repeats out the information to all nearby portable units on the second frequency. Toler states that this repeater function is enabled by removing the portable from the mobile unit (col. 2, lines 39-45).

The law is clear that to combine references in order to make a rejection under 35 U.S.C. § 103, there must be some clear teaching, suggestion or motivation present in the prior art to make the combination. It is not sufficient that the references could be combined, there must be a clear reason that would make such a combination obvious to one of ordinary skill in the art. Such motivation is lacking in the present case. As acknowledged by the Examiner, Toler does not disclose or suggest that the vehicles carrying the mobile units are located along a line of travel nor that the signals are transmitted along a line of travel of the vehicles. The Examiner identifies as the reason or motivation to apply Sarnoff’s disclosure to Toler that it would be obvious to “have the vehicles go along a line of travel in order to follow a line of flight in a continuous from origination to destination.” However, considering Toler’s disclosure as a whole, as required by the law, this reasoning does not make sense. Applicant does not dispute

that Sarnoff shows airplanes in a line of flight. However, Applicant does dispute the applicability of Sarnoff's disclosure to Toler. Toler does not mention lines of travel of the vehicles because Toler describes a system that is used after the vehicles arrive at a given location. Toler makes repeated references to police or emergency personnel "arriving at the scene" or "converging at a location." The context of Toler's disclosure is communication between multiple personnel (e.g., police or firefighters) at the location of an emergency. Toler uses the mobile unit repeater to repeat out a signal from its corresponding portable unit to other portable units in the area. Toler is not at all concerned with having the signal "follow a line of flight from origin to destination."

Furthermore, Toler states that the repeater function of the mobile units is activated when the portable unit is removed (col. 2, lines 43-44). In other words, the (priority) mobile unit acts to repeat signals received from its portable unit to all nearby portable units when an operator leaves the vehicle and takes the portable unit with him. Thus, there is no reason whatsoever to have Toler's vehicles (mobile units) be along a line of travel because when the vehicles are traveling it can be assumed that the operator is in the vehicle and that the portable unit is not detached from the mobile unit. In this situation, the mobile unit is not acting as a repeater. Therefore, Toler in fact teaches away from the proposed modification of having the vehicles follow a line of travel because Toler's disclosure is specifically geared toward a system used when vehicles (and their operators) have already arrived at their destination.

Considering each of the references as a whole and taking their disclosures in context, there is simply no suggestion or motivation whatsoever that would lead one of ordinary skill in the art to combine Toler and Sarnoff. To the contrary, as discussed above, Toler teaches away from the proposed combination. Accordingly, the combination of Toler and Sarnoff proposed in the Office Action is improper and the rejection therefore cannot stand. In view of the foregoing, withdrawal of the rejection of claims 13 and 34 is respectfully requested.

Claims 14, 15 and 35 depend from one of claims 13 and 34 discussed above. In addition, claims 20, as amended, and 16 also depend from claim 13. Each of claims 14-16, 20 and 35 is therefore allowable for at least the same reasons as discussed with respect to its base claim. Accordingly, withdrawal of the rejection of claims 14-16, 20 and 35 is respectfully requested.

Claim 37 depends from claim 33 which depends from claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) fails to disclose or suggest at least one limitation recited in Applicant's claim 24, as amended. Sarnoff fails to cure the deficiencies of Toler (and-Bartholomew). Therefore, for at least the above-discussed reasons, claim 24, and thus claim 37 which depends from it, is patentable over the art of record. Accordingly, withdrawal of the rejection of claim 37 is respectfully requested.

Further Rejections of Dependent Claims under 35 U.S.C. § 103

Claims 5 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Toler in view of Ley (U.S. 2,579,591). Applicant respectfully traverses this rejection. Claim 5 depends from independent claim 1 and claim 26 depends from independent claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Ley fails to cure the deficiencies of Toler because Ley does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled to the first transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern," as is recited in Applicant's claim 24, as amended. Therefore, although Applicant does not concede that the proposed combination of Toler and Ley is proper and reserves the right to traverse the combination in the future, even if one does combine Toler and Ley as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 5 and 26 is respectfully requested.

Claims 6 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Toler in view of Grazioli (U.S. 5,201,834). Applicant respectfully traverses this rejection. Claim 6 depends from independent claim 1 and claim 27 depends from independent claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Grazioli fails to cure the deficiencies of Toler because Grazioli also does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled

to the first transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern," as is recited in Applicant's claim 24, as amended. Therefore, although Applicant does not concede that the proposed combination of Toler and Grazioli is proper and reserves the right to traverse the combination in the future, even if one does combine Toler and Grazioli as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 5 and 26 is respectfully requested.

Claims 3, 7 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Toler in view of Hatano (U.S. 5,355,511). Applicant respectfully traverses this rejection. Claims 3 and 7 depend from independent claim 1, and claim 28 depends from independent claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Hatano fails to cure the deficiencies of Toler because Hatano also does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled to the first transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern," as is recited in Applicant's claim 24, as amended. Therefore, although Applicant does not concede that the proposed combination of Toler and Hatano is proper and reserves the right to traverse the combination in the future, even if one does combine Toler and Hatano as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 3, 7 and 28 is respectfully requested.

Claims 9 and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Toler in view of Penners (U.S. 5,793,762). Applicant respectfully traverses this rejection. Claim 9 depends from claim 1 and claim 30 depends from claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Penners fails to cure the deficiencies of Toler because Penners also does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled to the first

transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern," as is recited in Applicant's claim 24, as amended. Applicant does not concede that the proposed combination of Toler and Penners is proper and reserves the right to traverse the combination in the future. However, even if one does combine Toler and Penners as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 9 and 30 is respectfully requested.

Claims 11 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Arpino (U.S. 4,163,216). Applicant respectfully traverses this rejection. Claim 11 depends from claim 1 and claim 32 depends from claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Arpino fails to cure the deficiencies of Toler because Arpino also does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled to the first transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern," as is recited in Applicant's claim 24, as amended. Applicant does not concede that the proposed combination of Toler and Arpino is proper and reserves the right to traverse the combination in the future. However, even if one does combine Toler and Arpino as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 11 and 32 is respectfully requested.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Stillinger (U.S. 5,982,333). Applicant respectfully traverses this rejection. Claim 19 depends from claim 13. As discussed above, the proposed combination of Toler and Sarnoff asserted against claim 13 is improper and the rejection of claim 13 should be withdrawn. Stillinger fails to cure the deficiencies of Toler and Sarnoff. The references of record therefore do not render Applicant's claim 13 unpatentable. Claim 19 is allowable for at least the same reasons as is claim 13 from which it depends. Accordingly, withdrawal of the rejection of



claim 19 is respectfully requested.

Claims 18 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Bartholomew (U.S. 5,818,385). Applicant respectfully traverses this rejection. Claim 18 has been amended to depend from claim 13 and claim 38 has been amended to depend from claim 34. As discussed above, the proposed combination of Toler and Sarnoff asserted against claims 13 and 34 is improper and the rejection of these claims should be withdrawn. Bartholomew fails to cure the deficiencies of Toler and Sarnoff and could not be combined with the already improper combination of Toler and Sarnoff. Therefore, the references of record do not render Applicant's claims 13 and 34 unpatentable. Claims 18 and 38 are allowable for at least the same reasons as are claims 13 and 34 from which they depend. Accordingly, withdrawal of the rejection of claims 18 and 38 is respectfully requested.

Claims 20 and 39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Garner (U.S. 6,112,085). Applicant respectfully traverses this rejection. Claim 20, as amended, depends from claim 13 and claim 39, as amended, depends from claim 34. As discussed above, the proposed combination of Toler and Sarnoff asserted against claims 13 and 34 is improper and the rejection of these claims should be withdrawn. Garner fails to cure the deficiencies of Toler and Sarnoff and could not be combined with the already improper combination of Toler and Sarnoff. Therefore, the references of record do not render Applicant's claims 13 and 34 unpatentable. Claims 20 and 39 are allowable for at least the same reasons as are claims 13 and 34 from which they depend. Accordingly, withdrawal of the rejection of claims 20 and 39 is respectfully requested.

Claims 21 and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Toler in view of Simon (U.S. 5,530,909). Applicant respectfully traverses this rejection. Claim 21 depends from claim 1 and claim 40 depends from claim 24. As discussed above, Toler (whether taken alone or in combination with Bartholomew) does not disclose or suggest at least one limitation recited in each of Applicant's independent claims 1 and 24. Simon fails to cure the deficiencies of Toler because Simon also does not disclose or suggest "a directional antenna having focused transmit and reception patterns that is coupled to the first transmitter/receiver unit and is adapted to receive and transmit the information signal, as is recited in Applicant's claim 1, as amended, or "re-transmitting the information signal in a focused transmit pattern,"

as is recited in Applicant's claim 24, as amended. Applicant does not concede that the proposed combination of Toler and Simon is proper and reserves the right to traverse the combination in the future. In addition, as discussed above, the proposed combination of Toler and Bartholomew is improper and therefore Simon could not be added to this already improper combination. However, even if one does combine Toler and Simon as proposed in the Office Action, the combination fails to disclose or suggest at least one limitation recited in Applicant's claims. Accordingly, withdrawal of the rejection of claims 21 and 40 is respectfully requested.

#### Double Patenting Rejection


Claims 1-25 stand rejected on the grounds of nonstatutory double-patenting in view of U.S. 6,751,442. To overcome this rejection, Applicant has filed herewith a terminal disclaimer in compliance with 37 C.F.R. 1.321(c). Accordingly, withdrawal of the rejection of claims 1-25 is respectfully requested.

#### CONCLUSION

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application should now be in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/2762, Ref. No. A0602-7002

Respectfully submitted,  
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